Amendments to the Claims

- 1. (Original) A method of embossing a cured silicone resin thermoset substrate to imprint patterns onto the substrate from a master mold comprising:
 - (i) stacking a master mold with a cured silicone resin thermoset substrate such that the surface of the master mold containing a feature is facing the silicone resin substrate;
 - (ii) applying pressure to the product of (i) in a press at a temperature slightly higher than the Tg of the silicone resin but lower than the softening point of the master mold;
 - (iii) cooling the product of (ii) and maintaining the pressure on the mold; and
 - (iv) releasing the substrate whereby the feature is imprinted on the silicone resin substrate.
- 2. (Original) A method according to Claim 1, wherein the substrate is in the form of a film, plaque, or coating.
- 3. (Currently amended) A method according to Claims 1 or 2, wherein the toughened silicone resin thermoset substrates have a glass transition temperatures from 50 °C to 120°C.
- 4. (Currently amended) A method according to Claims 1, 2, or 3 wherein the pressure is at or above 1 metric ton.
- 5. (Currently amended) A method according to Claims 1, 2, 3, or 4, wherein the master mold is selected from silicon wafers, silicon carbide, silicon nitride, aluminum, stainless steel, nickel, alloys, and metal oxides.

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6. (Currently amended) A method according to Claims 1, 2, 3, 4, or 5 wherein the cured silicone resin thermoset substrate is a composition obtained by a method comprising (1) copolymerizing a combination comprising components (A) and (B) wherein component (A) is a hydrolyzate of a hydrolysis precursor wherein the hydrolysis precursor comprises (i) organotrialkoxysilanes or organotrihalosilanes and (ii) a monofunctional silane selected from triorganomonoalkoxysilanes, triorganomonohalosilanes, disiloxanes, and disilazanes and component (B) is a silyl-terminated hydrocarbon having the formula:

$$R^{2}$$
 R^{2}
 $|$
 R^{1} — Si - R^{4} - Si — R^{1}
 $|$
 R^{2} R^{2}

wherein each R^1 is independently selected from a halogen atom, a hydroxyl group, an alkoxy group, an oximo group, an alkyloximo group, an aryloximo group, an alkyloximo group, and an aryloximo group, each R^2 is independently selected from alkyl and aryl groups, and R^4 is a divalent hydrocarbon group.

7. (Currently amended) A method according to Claims 1, $\frac{2}{2}$, $\frac{3}{4}$, or $\frac{5}{4}$ wherein the cured silicone resin thermoset substrate is a composition comprising: (A') a silsesquioxane copolymer comprising units that have the empirical formula $R^1{}_aR^2{}_bR^3{}_cSiO_{(4-a-b-c)/2}$, wherein a is zero or a positive number, b is zero or a positive number, c is zero or a positive number, with the provisos that $0.8 \le (a+b+c) \le 3.0$ and component (A') has an average of at least two R^1 groups per molecule, each R^1 is a functional group independently selected from the group consisting of hydrogen atoms and monovalent hydrocarbon groups having aliphatic unsaturation, each R^2 is a monovalent hydrocarbon group selected from nonfunctional groups and R^1 , each R^3 is a monovalent hydrocarbon group selected from nonfunctional groups and R^1 ; (B') a silylterminated hydrocarbon having the general formula

$$R^{2}$$
 R^{2}
 $|$
 R^{1} — Si - R^{4} - Si — R^{1}
 $|$
 R^{2} R^{2}

where R^1 and R^2 are as described above for component (A'), with the provisos that when R^1 in component (A') is a hydrogen atom, R^1 in component (B') is an unsaturated monovalent hydrocarbon group and when R^1 in component (A') is an unsaturated monovalent hydrocarbon group, R^1 in component (B') is a hydrogen atom, and R^4 is a divalent hydrocarbon group; and (C') a hydrosilylation reaction catalyst.

- 8. (Currently amended) A method according to Claims 1, 2, 3, 4, or 5 wherein the cured silicone resin thermoset substrate is a polysiloxane film comprising a silicone resin obtained by a method comprising reacting (A") a silicone resin represented by the average formula R¹_aSiO_{(4-a)/2} wherein R¹ is independently a monovalent hydrocarbon radical having from 1 to 10 carbon atoms, and a is integer of from 0 to 2 (both exclusive)) and having at least two unsaturated aliphatic hydrocarbon radicals in its molecule, (B") an organosilicon compound having at least two silicon-bonded hydrogen atoms in its molecule, in the presence of (C") a platinum catalyst.
- 9. (Original) A method according to Claim 8, wherein Component (A") is a silicone resin comprising units

$$(R^1_3SiO_{1/2})_a(i)$$

$$(R^2_2SiO_{2/2})_b$$
 (ii)

$$(R^3SiO_{3/2})_c$$
 (iii) and

$$(SiO_{4/2})_d$$
 (iv)

wherein R^1 and R^2 are each independently selected from monovalent hydrocarbon radicals having from 1 to 10 carbon atoms and unsaturated aliphatic hydrocarbon radicals, R^3 is an alkyl group having from 1 to 8 carbon atoms or an aryl group, a has a value of zero or greater than zero, b has a value of zero or greater than zero, c has a value of zero or greater than zero, d has a value of zero or greater than zero, with the provisos that the value of c + d is greater than zero, the value of a + b + c + d = 1, and that are at least two silicon-bonded unsaturated aliphatic hydrocarbon atoms present in the silicone resin.

10. (Currently amended) A method according to Claims 8 or 9 wherein Component (B") is p-bis(dimethylsilyl) benzene.

- 11. (New) A method according to Claim 3, wherein the pressure is at or above 1 metric ton.
- 12. (New) A method according to Claim 11, wherein the master mold is selected from silicon wafers, silicon carbide, silicon nitride, aluminum, stainless steel, nickel, alloys, and metal oxides.
- 13. (New) A method according to Claim 12, wherein the cured silicone resin thermoset substrate is a composition obtained by a method comprising (1) copolymerizing a combination comprising components (A) and (B) wherein component (A) is a hydrolyzate of a hydrolysis precursor wherein the hydrolysis precursor comprises (i) organotrialkoxysilanes or organotrihalosilanes and (ii) a monofunctional silane selected from triorganomonoalkoxysilanes, triorganomonohalosilanes, disiloxanes, and disilazanes and component (B) is a silyl-terminated hydrocarbon having the formula:

$$R^{2}$$
 R^{2}
 $|$
 $R^{1} - Si - R^{4} - Si - R^{1}$
 $|$
 R^{2} R^{2}

wherein each R^1 is independently selected from a halogen atom, a hydroxyl group, an alkoxy group, an oximo group, an alkyloximo group, an aryloximo group, an alkyloximo group, and an aryloximo group, each R^2 is independently selected from alkyl and aryl groups, and R^4 is a divalent hydrocarbon group.

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14. (New) A method according to Claim 12, wherein the cured silicone resin thermoset substrate is a composition comprising: (A') a silsesquioxane copolymer comprising units that have the empirical formula $R^1{}_aR^2{}_bR^3{}_cSiO_{(4-a-b-c)/2}$, wherein a is zero or a positive number, b is zero or a positive number, c is zero or a positive number, with the provisos that $0.8 \le (a+b+c) \le 3.0$ and component (A') has an average of at least two R^1 groups per molecule, each R^1 is a functional group independently selected from the group consisting of hydrogen atoms and monovalent hydrocarbon groups having aliphatic unsaturation, each R^2 is a monovalent hydrocarbon group selected from nonfunctional groups and R^1 , each R^3 is a monovalent hydrocarbon group selected from nonfunctional groups and R^1 ; (B') a silyl-terminated hydrocarbon having the general formula

$$R^{2}$$
 R^{2}
 $|$
 $R^{1} - Si - R^{4} - Si - R^{1}$
 $|$
 R^{2} R^{2}

where R^1 and R^2 are as described above for component (A'), with the provisos that when R^1 in component (A') is a hydrogen atom, R^1 in component (B') is an unsaturated monovalent hydrocarbon group and when R^1 in component (A') is an unsaturated monovalent hydrocarbon group, R^1 in component (B') is a hydrogen atom, and R^4 is a divalent hydrocarbon group; and (C') a hydrosilylation reaction catalyst.

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- 15. (New) A method according to Claim 12, wherein the cured silicone resin thermoset substrate is a polysiloxane film comprising a silicone resin obtained by a method comprising reacting (A") a silicone resin represented by the average formula $R^1_a SiO_{(4-a)/2}$ wherein R^1 is independently a monovalent hydrocarbon radical having from 1 to 10 carbon atoms, and a is integer of from 0 to 2 (both exclusive)) and having at least two unsaturated aliphatic hydrocarbon radicals in its molecule, (B") an organosilicon compound having at least two silicon-bonded hydrogen atoms in its molecule, in the presence of (C") a platinum catalyst.
- 16. (New) A method according to Claim 15 wherein Component (B") is p-bis(dimethylsilyl) benzene.
 - 17. (New) A product produced in accordance with the method of Claim 1.
 - 18. (New) A product produced in accordance with the method of Claim 14.
 - 19. (New) A product produced in accordance with the method of Claim 15.
 - 20. (New) A product produced in accordance with the method of Claim 16.